NYC Environmental Protection

Gowanus Superfund

June 19, 2018

Order Timeline

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- DEP has made significant progress towards providing a total of 12 million gallons (MG) of CSO storage by constructing two CSO facilities:
  - **8 MG tank** for **Outfall RH-034** at the RH-3 (Head-End) Site or the RH-4 (Park) Site (parallel designs); and
  - **4 MG tank** for **Outfall OH-007** at the OH-4 Site.

Milestone Description	Status – Date
Record of Decision	Issued – September 2013
Unilateral Administrative Order to NYC	Issued – May 2014
Settlement Agreement (RH-3/4)	Issued – June 2016
RH-3/4 CP-1 Design (Site Prep, Demolition)	Completed – June 2017
EIS for CSO Tanks	Completed – February 2018
RH-3 ULURP	Completed – April 2018
RH-3/4 CP-2 Design (Excavation, Foundation, Underground Tank)	Underway – April 2019
RH-3/4 CP-3 Design (Above Ground Structures, Mechanical)	Underway – September 2019
RH-3 Property Acquisition	Underway – April 2020
OH-007 Design Procurement	Underway – FY 2019

Budget Forecast	
Spent to date June 2018	$25M
Projected through September 2019	$49M

Draft EPA/SHPO MOA

Draft MOA Received 6/4/2018:

"The Nevins Street façade of the building at 234 Butler Street and approximately 30 to 50 linear feet of the Butler Street façade (exact length to be determined through an evaluation) **shall be stabilized during construction and incorporated into the proposed new building** that will house the controls for the CSO tank."

- This proposed work is not included in the CP1 design package, which to remain on schedule per the Order, must be bid out for construction next month.
- Adding it to CP1 could delay the bid by a year (redesign, funding authorization, legal review, etc.), and adds another several months of construction.
- Maintaining this structure in place during excavation and construction of the storage tank also makes that project less efficient: costs and timeline increases.
- There are some alternatives...

Note: EPA had the CP1 design since June 2017 without comment. If the MOA had been issued at that time, much less, if any, delay to the project.

Option 1- Move Architectural Elements

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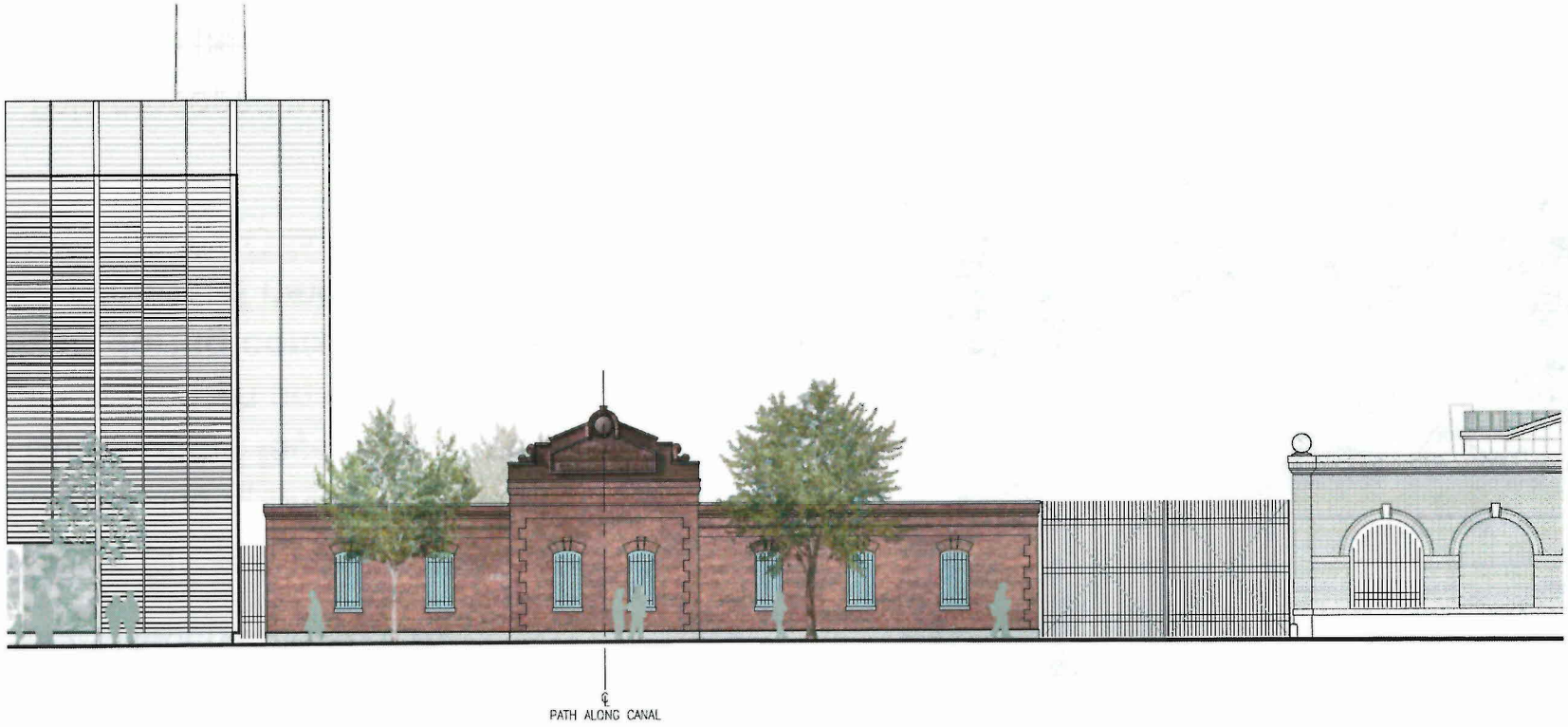
- Incorporate the pediment and scrolls on top of new Butler Street brick wall that will have a historical look.
- This option will result in the shortest delay.
- Adds $3M



Option 2: Deconstruct, Store, Reconstruct

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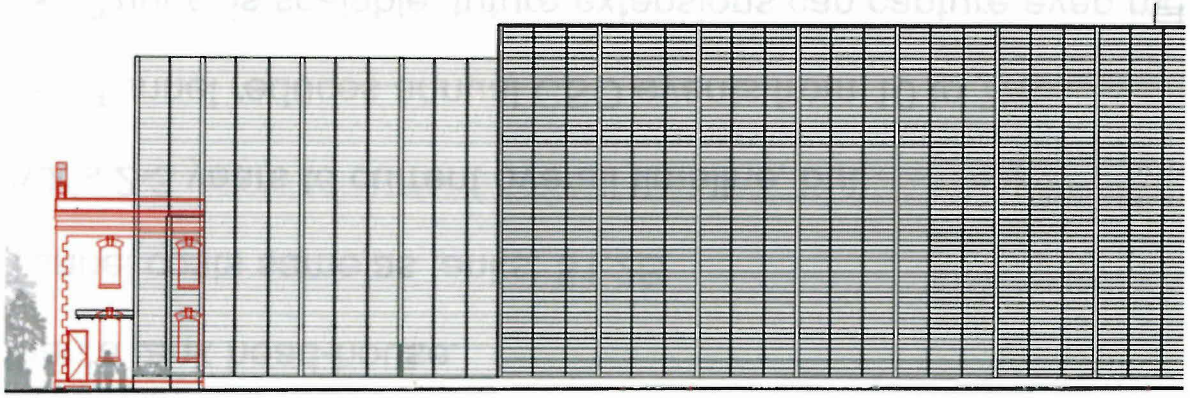
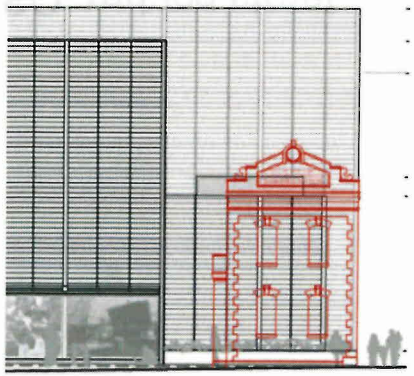
- Rather than the demolition that is specified in CP1, have the contractor carefully salvage as many bricks as possible plus all other architectural elements.
- The facades can then be reconstructed at the end of the full project in the existing location.
- Adds 6 months for CP1 construction duration plus an additional 6 - 9 months to redesign and repackage the CP1 construction package
- Adds $8M in construction costs



Perspective from Butler Street – Preservation of Approximately 20-ft of building



Perspective from Nevins Street – Preservation of full building width (approx. 22 ft)

Option 3: Build a storage tunnel instead of tanks

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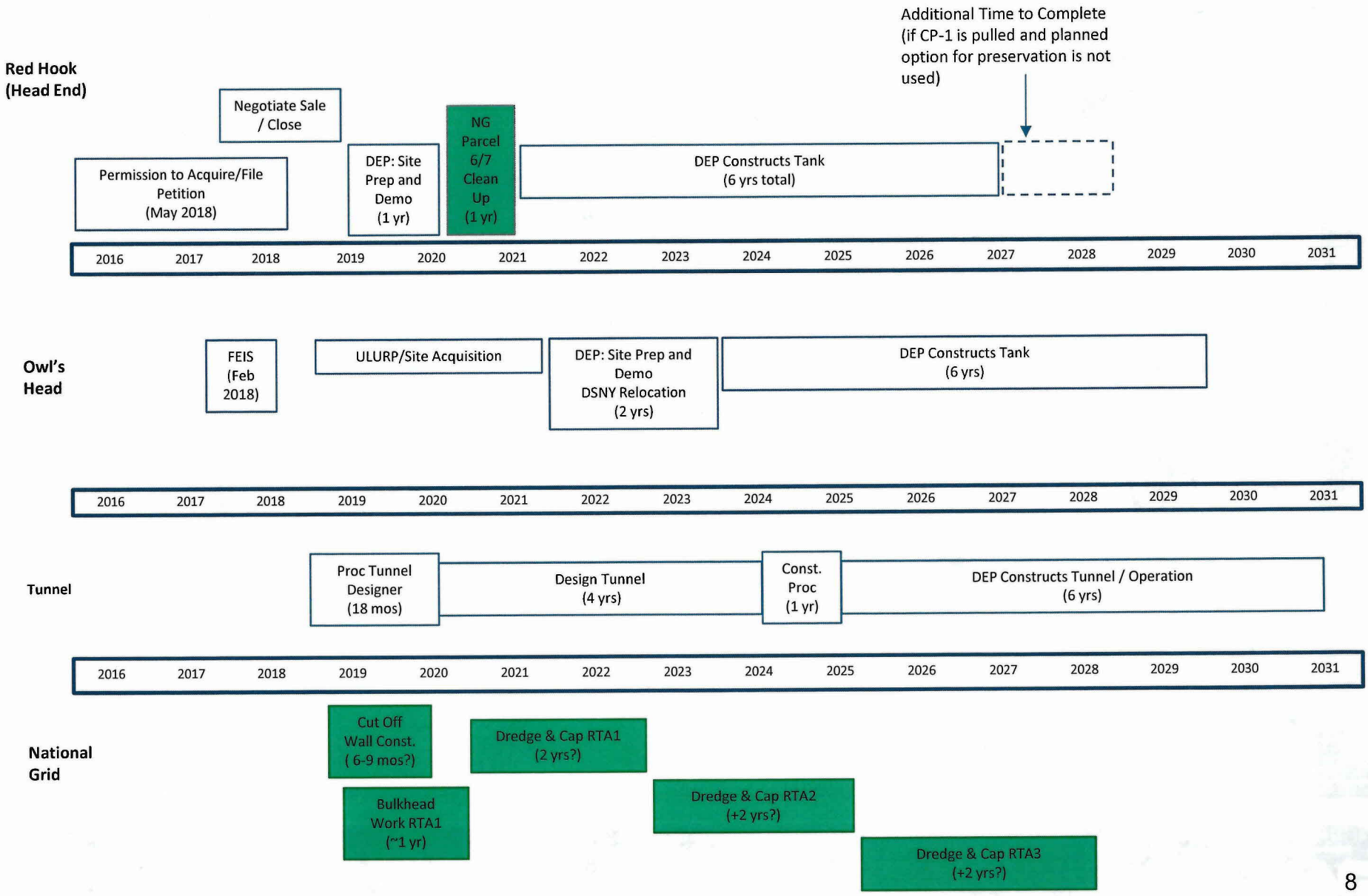
- Use modern storage tunnel system rather than older tanks. (DEP is doing tunnels for CSO LTCPs.)
- 234 Butler can remain unaltered with a tunnel shaft near the head of the canal rather than a tank head-house.
- Tunnel costs same as tanks: $1.2B
- Adds 2-3 years to current overall timeline, but:
  - ✓ Tunnel reduces annual CSO events from 10 to 7.
  - ✓ Tunnel is scalable; future extensions can capture even more CSO, reduce street flooding, help resiliency, reduce sewer backups.
  - ✓ Less construction disruption in neighborhood.
  - ✓ Potentially more public green space along the canal.
  - ✓ No additional property acquisition required.

Tunnel Provides Scalable Benefits

Timeframe


Red Hook (Head End)
Additional Time to Complete (if CP-1 is pulled and planned option for preservation is not used)
Negotiate Sale / Close
Permission to Acquire/File Petition (May 2018)
DEP: Site Prep and Demo (1 yr)
NG Parcel 6/7 Clean Up (1 yr)
DEP Constructs Tank (6 yrs total)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031
Owl's Head
FEIS (Feb 2018)
ULURP/Site Acquisition
DEP: Site Prep and Demo DSNY Relocation (2 yrs)
DEP Constructs Tank (6 yrs)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031
Tunnel
Proc Tunnel Designer (18 mos)
Design Tunnel (4 yrs)
Const. Proc (1 yr)
DEP Constructs Tunnel / Operation (6 yrs)
2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031
National Grid
Cut Off Wall Const. (6-9 mos?)
Bulkhead Work RTA1 (~1 yr)
Dredge & Cap RTA1 (2 yrs?)
Dredge & Cap RTA2 (+2 yrs?)
Dredge & Cap RTA3 (+2 yrs?)